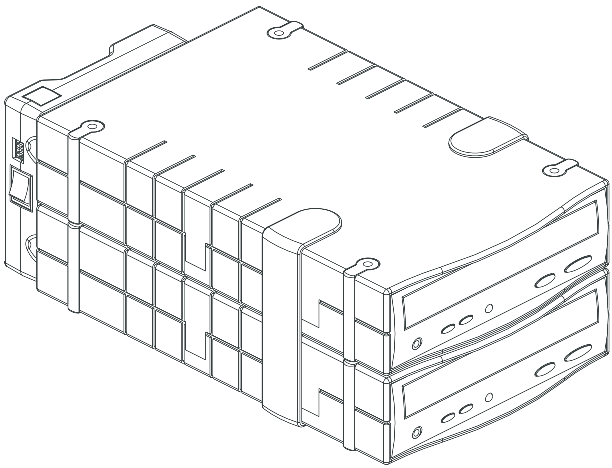
SmartDup

MODEL VP-8220



Installation Manual

ViPowER

We are your DataBridge™

http://www.vipower.com

Table of Contents

SmartDup VP-8220 Operation Manu

SmartDup VP-8220 Package Including:

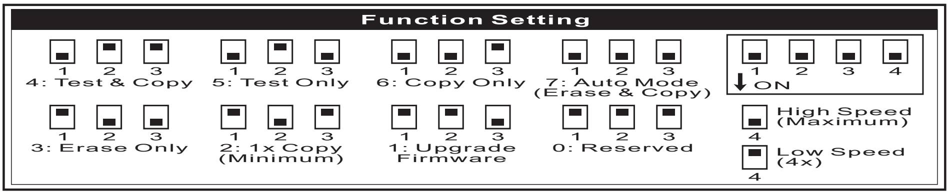
1. Duplicator Converter.
2. CD-ROM Box (VP-6020) x 2
3. AC/DC Power Adaptor (Universal Type +90 ~ +250VAC)

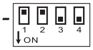
Features:

1. One to one Stand-Alone IDE CD Duplicator.
2. Auto duplication & Easy operation without any push bottom.
3. Fastest CD Duplicator up to 24x speed (ViPowER is the only factory that manufactures it today!)
4. Auto Detects CD-R or CD-RW media's acceptable maximum writing speed and minimum writing time.
5. Upgrade through Internet, or upgrade via CD-ROM.
6. High Performance with Low cost & easy installation. No additional H/W or S/W required.
7. External Power supply.
8. Supports Buffer Under Run.
9. Capable of connecting to your Desktop/ Notebook via Fire Wire/ USB/ PCMCIA/ Card Bus cable. (See option Desktop Interface)
10. Support Formats: Audio CD (CD-DA), CD-ROM, CD-XA (Photo & Video CD), CD-Digital, CD-Bridge, CD-Extra, Video CD & CD-Text.
11. Automatically detects/ Erases/ Re-writes/ Copies.
12. Compatible with most well known CD-RW & CD-ROM Devices.
13. User friendly with LED display function.
14. Buzzer to alert user.

Install Steps:

1. Install CDR-W Writer & CD-ROM Driver in each CD-ROM box. Must put rubber stand on each CD-ROM box.
2. CD-ROM Driver on top & CDR or CDR-W Writer on the bottom.
3. Plug in Duplicator Converter in both CD-ROM box connectors.
4. Plug in Power Cable in Duplicator Converter.
5. Plug in Power Cord to AC Power source (+90 ~ +250VAC).
*6. **LED Display** on top of Duplicator Converter.*
*7. **Dip Switch** on Top of Right hand side. To adjust duplicator function.*
*8. **Rock Switch** on Right hand side, power switch. Normally in **ON** position*



- *H1 (Upgrade firm-ware): DIP SW 3 4 at ON position, 1 2 at OFF position---* 

- *If you adjust DIP SW to L1, all operation step same as above, the Recording Speed will drop to 4x only.*

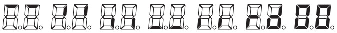
1-1. Turn Rock Switch to II position (CD Duplicator). LED will show version number.

Power-On: display firmware version number. (Buzzer 0.5s X1)
ex: 

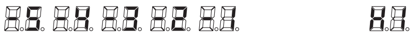
1-2. Than LED display showing: from 00,11, 22, 33, ...88, 99



1-3. Duplicator will chk itself & get ready.

Self-Test: Only one segment is running and display "rd" (ready)


1-4. Please insert your new Firm-Ware CD title into your CD-ROM Drives, operation step as below:
1-4-1. Please down load new Firm-Ware from www.vipower.com.tw or www.vipower.com to HDD.
1-4-2. Switch your power switch to I (PC interface)
1-4-3. Please check Optional Step (page 10)
1-4-4. Burning new Firm-Ware into your CD-R or CDR-W media.
1-5. LED Display showing final counts down. Than LED showing H1 or L1.

Count Down: After drives & discs ready in current mode, wait for 5 seconds. (Buzzer 0.2s X1)
ex: 

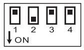
1-6. SmartDup will upgrade automatically.

1-7. After Upgrade success, Buzzer will Beep & eject Firm-Ware Title. LED showing 00.

OK: After Self-Test or Test or Erase or Copy. (Buzzer 1sX2)


1-8. Showing new firmware version.
1-8-1. If fail, LED will showing: Er & eject CD-R Media, Buzzer will Beep also.

FAIL: After Self-Test or Test or Erase or Copy or Upgrade. (Buzzer 0.2X3)


- *H2(1xCopy)：DIP SW 2 4 at ON position, 1 3 at OFF position---------------* 
- *L2(1xCopy)：DIP SW 2 at ON position, 1 3 4 at OFF position----------------* 
- *1xCopy Speed (H2 or L2) or CD-RW writer minimum writing speed.*

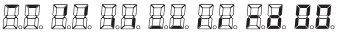
2-1. Turn Rock Switch to Ⅱ position (CD Duplicator). LED will show version number.

Power-On: display firmware version number. (Buzzer 0.5s X1)
ex: 

2-2. Than LED display showing: from 00,11, 22, 33, ...88, 99

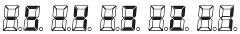


2-3. Duplicator will chk itself & get ready.

Self-Test: Only one segment is running and display "rd" (ready)


2-4. SmartDup ready, please insert your CD title into your CD-ROM Drive & Blank CD-R or CD-RW Media in CD-RW Writer.

2-5. LED Display showing final counts down, than LED showing H2 or L2.

Count Down: After drives & discs ready in current mode, wait for 5 seconds. (Buzzer 0.2s X1)
ex:   or 

2-6. LED Display showing CD-R or CD-RW Media writing speed or depend on CD-RW writer minimum writing speed.

CD-R Maximum Writing Speed:


2-7. LED Display showing CD-R or CD-RW Media minimum writing time remaining.

Remain minutes: During Test or Copy mode. Flash every second
ex:  or 

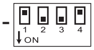
2-8. After Upgrade success, Buzzer will Beep & eject CD-R media. LED showing 00.

OK: After Self-Test or Test or Erase or Copy. (Buzzer 1sX2)


2-8-1. If fail, LED will showing: Er & eject CD-R Media, Buzzer will Beep also.

FAIL: After Self-Test or Test or Erase or Copy or Upgrade. (Buzzer 0.2X3)


- H3 (Erase Only): DIP SW 2 3 4 at ON position, DIP SW 1 at OFF position-- 

- L3 (Erase Only): DIP SW 2 3 at ON position, DIP SW 1 4 at OFF position--- 

- This function for RW Media with Data inside, operation steps same as H3, Erase speed drop to 4x only.

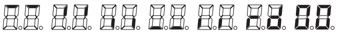
3-1. Turn Rock Switch to Ⅱ position (CD Duplicator). LED will show version number.

Power-On: display firmware version number. (Buzzer 0.5s X1)
ex: 

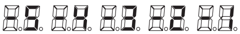
3-2. Than LED display showing: from 00,11, 22, 33, ...88, 99



3-3. Duplicator will chk itself & get ready.

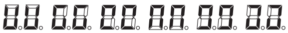
Self-Test: Only one segment is running and display "rd" (ready)


3-4. SmartDup ready, please insert your CD title into your CD-RW Media in CD-RW Writer.

Count Down: After drives & discs ready in current mode, wait for 5 seconds. (Buzzer 0.2s X1)
ex:   or 

3-5. LED Display showing final counts down, than LED showing H3 or L3.

3-6. Start Erasing.

Erasing:


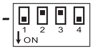
3-7. After Erased success, Buzzer will Beep & eject CD-RW media. LED showing 00.

OK: After Self-Test or Test or Erase or Copy. (Buzzer 1sX2)

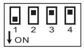

3-7-1. If fail, LED will showing: Er & eject CD-R Media, Buzzer will Beep also.

FAIL: After Self-Test or Test or Erase or Copy or Upgrade. (Buzzer 0.2X3)


- H4(Test & Copy Mode) : DIP SW 1 4 at ON position, 2 3 at OFF position-----



- L4(Test & Copy Mode) : DIP SW 1 at ON position, 2 3 4 at OFF position-----



- If you adjust DIP SW to L4, all operation steps same as H4, the Recording Speed will drop to 4x only.
- Please make sure CD-R or CD-RW media is blank.

4-1. Turn Rock Switch to Ⅱ position (CD Duplicator). LED will show version number.

Power-On: display firmware version number. (Buzzer 0.5s X1)
ex:

4-2. Than LED display showing: from 00, 11, 22, 33, ...88, 99

4-3. Duplicator will chk itself & get ready.

Self-Test: Only one segment is running and display "rd" (ready)

4-4. SmartDup ready, please insert your CD title into your CD-ROM Drive & Blank CD-R or CD-RW Media in CD-RW Writer.

4-5. LED Display showing final counts down, than LED showing H4 or L4.

Count Down: After drives & discs ready in current mode, wait for 5 seconds. (Buzzer 0.2s X1)
ex: or

4-6. LED Display showing CD-R or CD-RW Media maximum writing speed.

CD-R Maximum Writing Speed:
or or

4-7. LED Display showing CD-R or CD-RW Media minimum writing time remaining.

Remain minutes: During Test or Copy mode. Flash every second
ex: or or

4-8. After Test success, Buzzer Beep & LED showing 00. Than re-start Copy.

OK: After Self-Test or Test or Erase or Copy. (Buzzer 1sX2)

4-8-1. If fail, LED will show: Er & eject CD-R Media also.

FAIL: After Self-Test or Test or Erase or Copy or Upgrade. (Buzzer 0.2X3)

4-9. LED Display showing CD-R or CD-RW Media maximum writing speed.

CD-R Maximum Writing Speed:
or or

4-10. LED Display showing CD-R or CD-RW Media minimum writing time remaining.

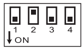
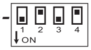
Remain minutes: During Test or Copy mode. Flash every second
ex: or or

4-11. After Copy success, Buzzer will Beep & eject CD-R media. LED showing 00

OK: After Self-Test or Test or Erase or Copy. (Buzzer 1sX2)

4-11-1. If fail, LED will showing: Er & eject CD-R Media, Buzzer will Beep also

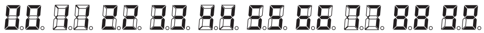
FAIL: After Self-Test or Test or Erase or Copy or Upgrade. (Buzzer 0.2X3)

- *H5 (Test Only): DIP SW 1 3 4 at ON position, 2 at OFF position--------------* 
- *L5 (Test Only): DIP SW 1 3 at ON position, 2 4 at OFF position---------------* 
- *If you adjust DIP SW to L5, all operation steps same as H5, the Recording Speed will drop to 4x only.*

5-1. Turn Rock Switch to Ⅱ position (CD Duplicator). LED will show version number.

Power-On: display firmware version number. (Buzzer 0.5s X1)
ex: 

5-2. Than LED display showing: from 00,11, 22, 33, ...88, 99



5-3. Duplicator will chk itself & get ready.

Self-Test: Only one segment is running and display "rd" (ready)



5-4. SmartDup ready, please insert your CD title into your CD-ROM Drive & Blank CD-R or CD-RW Media in CD-RW Writer.

5-5. LED Display showing final counts down, than LED showing H5 or L5.

Count Down: After drives & discs ready in current mode, wait for 5 seconds. (Buzzer 0.2s X1)
ex:   or 

5-5-1. If put in CD-RW Media with Data; CD-RW will eject & show Er.

FAIL: After Self-Test or Test or Erase or Copy or Upgrade. (Buzzer 0.2X3)



5-6. LED Display showing CD-R or CD-RW Media maximum writing speed.

CD-R Maximum Writing Speed:

 or  or 

5-7. LED Display showing CD-R or CD-RW Media minimum writing time remaining.

Remain minutes: During Test or Copy mode. Flash every second
ex:  or  or 

5-8. After Testing success, Buzzer will Beep & eject CD-R media. LED showing 00.

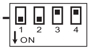
OK: After Self-Test or Test or Erase or Copy. (Buzzer 1sX2)



5-8-1. If fail, LED will show: Er & eject CD-R Media also.

FAIL: After Self-Test or Test or Erase or Copy or Upgrade. (Buzzer 0.2X3)

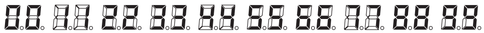


- *H6 (Copy Only): DIP SW 1 2 4 at ON position, 3 at OFF position-------------* 
- *L6 (Copy Only): DIP SW 1 2 at ON position, 3 4 at OFF position-------------* 
- *If you adjust DIP SW to L6, all operation steps same as H6, the Recording Speed will drop to 4x only.*

6-1. Turn Rock Switch to Ⅱ position (CD Duplicator). LED will show version number.

Power-On: display firmware version number. (Buzzer 0.5s X1)
ex: 

6-2. Than LED display showing: from 00,11, 22, 33, ...88, 99



6-3. Duplicator will chk itself & get ready.

Self-Test: Only one segment is running and display "rd" (ready)


6-4. SmartDup ready, please inserts your CD title into your CD-ROM Drive & Blank CD-R or CD-RW Media in CD-RW Writer.

6-5. LED Display showing final counts down, than LED showing H6 or L6.

Count Down: After drives & discs ready in current mode, wait for 5 seconds. (Buzzer 0.2s X1)
ex:   or 

6-5-1. If put in CD-RW Media with Data, CD-RW will eject & show Er.

FAIL: After Self-Test or Test or Erase or Copy or Upgrade. (Buzzer 0.2X3)


6-6. LED Display showing CD-R or CD-RW Media maximum writing speed.

CD-R Maximum Writing Speed:
 or  or 

6-7. LED Display showing CD-R or CD-RW Media minimum writing time remaining.

Remain minutes: During Test or Copy mode. Flash every second
ex:  or  or 

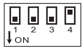
6-8. After writing success, Buzzer will Beep & eject CD-R media. LED showing 00.

OK: After Self-Test or Test or Erase or Copy. (Buzzer 1sX2)


6-8-1. If fail, LED will show: Er & eject CD-R Media also.

FAIL: After Self-Test or Test or Erase or Copy or Upgrade. (Buzzer 0.2X3)


- *H7(High Speed Auto Mode):DIP SW always at ON position------------------* 

- *L7(Low Speed Auto Mode):DIP SW 1 2 3 at ON position, 4 at OFF position-* 

- *If you adjust DIP SW to L7, all operation steps same as H7, the Recording Speed will drop to 4x only.*

7-1. Turn Rock Switch to Ⅱ position (CD Duplicator). LED will show version number.

Power-On: display firmware version number. (Buzzer 0.5s X1)
ex:


7-2. Than LED display showing: from 00,11, 22, 33, ...88, 99



7-3. Duplicator will chk itself & get ready.

Self-Test: Only one segment is running and display "rd" (ready)


7-4. SmartDup ready, please insert your CD title into your CD-ROM Drive & Blank CD-R or CD-RW Media in CD-RW Writer.

7-5. LED Display showing final counts down, than LED showing H7 or L7.

Count Down: After drives & discs ready in current mode, wait for 5 seconds. (Buzzer 0.2s X1)
ex:

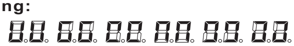

7-5-1. If insert CD-R Media with Data inside, it will eject & showing Er & if insert CD-RW media with data, LED display will showing Er & CA, RW driver will eject RW media.

FAIL: After Self-Test or Test or Erase or Copy or Upgrade. (Buzzer 0.2X3)


7-5-2. If put RW tray in, than LED will show final count down & Erasing RW.

Count Down: After drives & discs ready in current mode, wait for 5 seconds. (Buzzer 0.2s X1)
ex:


7-5-3.

Erasing:


7-6. LED Display showing CD-R or CD-RW Media maximum writing speed.

CD-R Maximum Writing Speed:


7-7. LED Display showing CD-R or CD-RW Media minimum writing time remaining.

Remain minutes: During Test or Copy mode. Flash every second
ex:


7-8. After writing success, Buzzer will Beep & eject CD-R media. LED showing 00.

OK: After Self-Test or Test or Erase or Copy. (Buzzer 1sX2)


7-8-1. If fail, LED will show: Er & eject CD-R Media also.

FAIL: After Self-Test or Test or Erase or Copy or Upgrade. (Buzzer 0.2X3)


SmartDup VP-8220 Optional interface:

1. VP-9006: PCMCIA to IDE cable with 36 pin connector.
2. VP-9007: CardBus to IDE cable with 36 pin connector.
3. VP-9008: USB 1.1 to IDE cable with 36 pin connector.
4. VP-9009: FireWire IEEE 1394 to IDE cable with 36 pin connector.
5. VP-9208: USB 2.0 to IDE cable with 36 pin connector.

Features:

1. External CD-RW writer.
2. Back Up your own Data/ Audio/ Video from HDD/ MO/ LS120/ ZIP... through your PC/ Note Book/ MAC to your SmartDup

HardWare minimum Request:

1. PCMCIA Type I or Type II Slot, USB port or FireWire.
2. Pentium II 400 Mhz or Greater.
3. 64 MB RAM.
4. USB 2.0 version needs USB2.0 Host Card (VP-9628) or other compatible USB 2.0 Host Card.
5. FireWire 1394 IEEE need FireWire 1394 IEEE Host Card (VP-9609) or other compatible 1394 IEEE Host Card.
6. CardBus to USB 2.0: Please make sure your NoteBook PCMCIA Slot support CardBus (VP-9728) or other compatible Card.
7. CardBus to FireWire 1394 IEEE: Please make sure your NoteBook PCMCIA Slot support CardBus (VP-9709) or other compatible Card.
8. One of the Following Operating System:
(1.) Win 98SE/ 2000/ ME/ MAC os 9.0x for USB 1.1 version.
(2.) Win 98SE/ 2000/ ME/ MAC os 9.0x for USB 2.0 version
(3.) Win 98SE/ 2000/ ME/ MAC os 9.0x for FireWire.
(4.) Win 98SE/ 2000/ ME for CardBus.
(5.) Win 98SE/ 2000/ ME for PCMCIA.

Driver Software request:

1. USB 1.1 version interface: Need install USB drive software under Win 98SE & No Need install any USB drive software under Win ME/ Win 2000 & MAC os 9.0.
2. USB 2.0 version interface: Need install USB drive software under Win 98SE & No Need install any USB drive software under Win ME/ Win 2000 & MAC os X.
3. FireWire IEEE 1394 Interface: No Need install any drive software under Win 98SE/ ME/ Win 2000 & MAC os 9.0.
4. CardBus Interface: Need install CardBus drive software under Win 98SE/ ME/ Win 2000.
5.PCMCIA Interface: No Need install any drive software under Win 98SE/ ME/ Win 2000.

Install Steps:

1. *Install CD-RW Writer & CD-ROM Driver in each CD-ROM box. Must put rubber stand on each CD-ROM box.*
2. *CD-ROM Driver on top & CDR or CD-RW Writer on the bottom.*
3. *Plug in Duplicator Converter in both CD-ROM box connectors.*
4. *Plug in Power Cable in Duplicator Converter.*
5. *Plug in Power Cord to AC Power source (+90 ~ +250VAC).*
6. *36 pin IDE cable connect between SmartDup & your PC or Note Book interface port.*
7. *Turn your Power switch to* I *(PC interface), LED Display will blinking.*
8. *Make sure install success.*
9. *You can start back-up your Data/ Audio/ Video.*

Caution:

1. *Make sure CD-RW burning software can recognize CD-RW writer.*
2. *Make sure your CD-R or CD-RW media acceptable maximum writing speed.*
3. *Maximum data transfer rate (byte/sec)*

	PCMCIA	CardBus	USB 1.1	USB 2.0	FireWire
4X	600K	600K	600K	600K	600K
6X	900K	900K	900K	900K	900K
8X	1200K	1200K	900K	1200K	1200K
24X	2000K	3600K	900K	3600K	3600K
32X	2000K	3600K	900K	4800K	4800K
40X	2000K	3600K	900K	6000K	6000K

4. *CD-RW Driver Maximum Writing Speed through PC Interface:*
   (1.) PCMCIA: 8 x
   (2.) CardBus: 16 x
   (3.) USB 1.1 Version: 4 x
   (4.) USB 2.0 Version: 20 x
   (5.) FireWire IEEE 1394: 20 x

New Firm-Ware download:

1. *Same as* ***Install Step*** *1~ 8 at page 11.*
2. *Please down load new Firm-Ware from www.vipower.com.tw or www.vipower.com to HDD.*
3. *Put CD-RW or CD-R media in to your CD-RW writer.*
4. *CD-RW writer as External CD-RW writer.*
5. *Start Copy New Firm-Ware to RW media.*
6. *Back to Page 3.*

How to Up-Grade CD-ROM F irm-Ware

If you wish get best performance on your SmartDup.

1. Please visit ViPowER web-site www.vipower.com to check CD-ROM Brand/ Model number & Firm-Ware Version Number.

2. ViPowER Inc. CDR/RW Driver Approved List

Brand	Model Number	Note	Brand	Model Number	Note
Acer	CRW1208A	SeamLess	Plextor	PX-W1210A	
AOpen	CRW9420A		Plextor	PX-W1610A	BurnProof
AOpen	CRW9624A		Ricoh	7040A	
AOpen	CRW 1232A	JustLink	Ricoh	7060A	
AOpen	CRW2040	JustLink	Ricoh	7080A	
BTC	4424		Ricoh	MP7200A	
HP	8100i		SONY	CRX-100E	
HP	8200		SONY	CRX-120E	
HP	9100		SONY	CRX-140E	
HP	9200		SONY	CRX-145E	
HP	9300		SONY	CRX-160E	
Lite-On	LTR-12101B	BurnProof	YAMAHA	4416E	
Lite-On	LTR-16101B	BurnProof	YAMAHA	8424E	
Lite-On	LTR-16102B	BurnProof	YAMAHA	8824E	
Lite-On	LTR-24102B	BurnProof	YAMAHA	2100E	
Panasonic	7585		TDK	CRD-BP1300P	BurnProof
Panasonic	7586		TEAC	CRW54E	
Philips	PCA460RW		TEAC	CRW512EB	BurnProof
Philips	CDD-4801		Sanyo	CRD-BP1400	
Plextor	PX-W8432T	BurnProof	Sanyo	CRD-BP1500P	BurnProof

3. Best Match (ViPowER will give several suggest for you reference).

4. Than you can get best performance on your SmartDup.

5. ViPowER will recommend several match, not only performance, but also easy to purchase from any retail chain store near by you.

6. Do not up-grade by yourself, but you can ask your store up-grade for you.

7. If you wish up-grade by yourself, please make sure can up-grade success. If fail, this CD-ROM driver can't use anymore. On the other hand, most of CD-ROM manufacture will not take any responsibility, because up-grade fail.

8. You can ask your retail store to purchase any brand of CD-ROM driver, which ViPowER supply or recommend.

9. CD-ROM Compatibility List

CD-RW	ACER 52x	Afreey 52x	AOpen 52x	ASUS 52x	LITEON 52x	TEAC 40x
8x	x	x	x	x	x	x
12x	x	x	x	x	x	x
16x	x	x	x	x	x	x
20x		x	x	x	x	x
24x						x

Acer CD-ROM Model Number: CD-652P Version: ??
AOpen CD-ROM Model Number: CD-952E/TKU Version: C41
Asus CD-ROM Model Number: CD-S 950/A Version: 1.0D
AFreey CD-ROM Model Number: CD-2052E Version: V31
LiteOn CD-ROM Model Number: LTN-526S Version: YS0C
TEAC CD-ROM Model Number: CD-540E Version: 3.0A

10. For more information, please check www.vipower.com or www.vipower.com.tw
Or you can send e-mail to us.

